



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
06/835,665	03/03/86	CHRISTOFF	82K54-A1

ROCKETDYNE PATENT DEPT. FB18
ROCKWELL INTL.
6633 CANOGA AVE.
CANOGA PARK, CA 91304

EXAMINER	
STEINBERGER, B	
ART UNIT	PAPER NUMBER
1.1	3

DATE MAILED: 10/02/87

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A ~~shortened statutory~~ period for response to this action is set to expire 6 month(s), 0 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-15 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-15 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are ☐ acceptable;
☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

This document contains information under
SECURITY OF DEFENSE, as defined in 55 USC 161-168,
Distribution Discreetness subject to Civil
and Criminal Penalties.

EXAMINER'S ACTION

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- (U) 1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Applicant is requested to provide a Prior Art Statement in accordance with MPEP 2001.02, 2001.02(a) and 2001.02(b).

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to provide an adequate written description of the invention and failing to adequately teach how to make and/or use the invention. An algorithm necessary to make and use what applicant regards as his invention as referred to on page 7 of the specification is required. See 37 CFR 1.96.

3. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, for the reasons set forth in the above objection to the specification.

4. Claims 2, 4, 5, 7, 9, 13 and 14 are rejected under 35 U.S.C. 112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled

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in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase, "the regenerative piston principle", claim 2, and "the position", claim 14, are indefinite for not having proper antecedent bases. These phrases are further unclear what principle and positions are referred.

The phrases "pulse rate or sequence", claim 4, and "into or out", claim 14, are alternative and unclear whether either or both features specified are inclusive.

The phrases "meaningful coded message", claims 4 and 9, and "roughly about", claims 5 and 7, are vague and unclear for not reciting positive limiting metes and/or bounds. The specification does not have proper and enabling bases for all the claim language interpretations that would be encompassed by Applicant's broad claimed phrases.

(U)

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(U)

6. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the dif-

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ferences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

7. Claims 1-9 are directed to the same invention as that of claims 1-9 of commonly assigned application Serial No. 06/623,282. The issue of priority under 35 U.S.C. 102(f) of this single invention must be resolved.

Since the Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see M.P.E.P. 1101.01(b)), the assignee is required to state which entity is the prior inventor of the conflicting subject matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) and (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of the application.

8. Claims 1-9 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-9 of copending application Serial No. 06/623,282.

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This is a provisional double patent rejection since the conflicting claims have not in fact been patented.

9. Claims 1-15 are provisionally rejected under 35 U.S.C. 102(e) as being anticipated by copending application serial number 06/623,282.

Copending application serial number 06/623,282 inventor has a common assignee inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if patented. This provisional rejection under 35 U.S.C. 102(e) is based upon a presumption of future patenting of the conflicting copending application.

This provisional rejection under section 102(e) might be overcome either by a showing under 37 CFR 1.132 that any unclaimed invention disclosed in the copending application was derived from the inventor of this application and is thus not the invention "by another", or by a showing of a date of invention of any unclaimed subject matter prior to the effective U.S. filing date of the copending application under 37 CFR 1.131.

10. Claims 10-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10-13 of copending application serial no. 06/623,282.

Although the conflicting claims are not identical, they are not patentably distinct from each other because Prior Copending application 06/623,282 specifically claim 10, of the prior copending application describes substantially the same functions as that of the subject application with the exception that the acoustic generator of the prior case is not specified for use in water, and the prior case specifies a deflector plate

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instead of the "dispenser means" as that of the subject application. It would be extremely well within the skill of the one having ordinary skill in the art to use an acoustic generator in an aquatic environment. See MPEP 706.02(a). Further the "deflector plate" of the prior case clearly disperses the combustion gases like that of the "dispenser means" of the subject matter described in this case.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

(U) 11. The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. In re Vogel, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

12. Claims 1 and 3-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over Hermesen et al. or Goldberg. Hermesen et al. and Goldberg each anticipate all the subject matter of activating pulse rocket type engines in an aquatic environment where it would be inherent to generate controlled repeatable and variable acoustic energy. If not inherent it would be well within the skill of one having ordinary skill in the art to continuously use reusable controllable and programmable seismic sources, (See MPEP 706.02(a)) to generate acoustic signals.

13. Claim 2 is rejected under 35 U.S.C. 103 as

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being unpatentable over Hermsen et al. or Goldberg as applied above and further in view of Stratton (Applicants Admitted Prior Art). The primary references disclose substantially all the claimed subject matter with the exception of not specifying their rocket engine to be the Hippe type. Stratton (Applicants' Admitted Prior Art on page 2 of the specification) teach the benefits of the Hippe type motor as a rocket engine. To merely substitute the Hippe rocket engine of Stratton for the rocket engine of either of the primary references as a mere substitution of equivalent parts is obvious to one having ordinary skill in the art.

14. Claims 10-14 are rejected under 35 U.S.C. 103 as being unpatentable over Hermsen or Goldberg in view of Kirby and Axelson. The primary references disclose substantially all the subject matter as described in paragraph 12 above with the exception of not specifically utilizing a disperser at the exhausting end of a pulse engine acoustic generator and not specifying the generator to be connected to a pipe means. Kirby and Axelson teach the well known benefits of respectively modifying acoustically generated sound with a generic labeled pipe and disperser deflector. To merely incorporate the pipe and disperser deflector of Kirby and Axelson onto the acoustic generator of the primary references to modify their acoustical output to achieve the benefits taught by Kirby and Axelson is obvious to one having ordinary skill in the art.

15. Claim 15 is rejected under 35 U.S.C. 103 as

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being unpatentable over Hermesen or Goldberg in view of Kirby and Axelson as applied to claims 10-14 above, and further in view of Stratton (Applicants Admitted Prior Art). The former combination of references substantially discloses all the claimed subject matter with the exception of not specifying it's combustion engine to be of the Hippe type. Stratton (Applicants Admitted Prior Art) on page 2 of the specification) teach the benefits of utilizing the Hippe type engine as a combustion engine. To merely substitute the Hippe engine of Stratton for the combustion engine of either of the primary references as a mere substitution of equivalent parts is obvious to one having ordinary skill in the art.

(4)

16. Any inquiry concerning this communication should be directed to Brian S. Steinberger at telephone number 703-557-4921.

Brian S. Steinberger/rg-9

08-11-87

Brian S. Steinberger
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